Application No.: 10/580,102

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (Currently Amended) A biodegradable starch bowl being prepared to have a

desired shape by heating and pressurizing a composition for the biodegradable starch bowl

comprising unmodified starch having anion charges of 500 meg(milliequivalent) or more of 20-

60 wt.%; pulp fiber powder of 5-30 wt.%; solvent of 30-60 wt.%; titanium dioxide for sterilizing

and deodorizing in which an anatiase content is 70% or more of 0.1-2.0 wt.%; said titanium

dioxide being doped with one or more selected from the group consisting of vanadium (V),

molybdenum (Mo) and niobium (Nb); sodium benzoate or sodium propionate of 0.01-1 wt.%,

based on the total amount of the composition; and a releasing agent of 0.5-5 wt.%, and a

biodegradable film which has a thickness of 100-300 µm for water-resistance, wherein the

biodegradable film is made of one or more selected from the group consisting of polybutylene

succinate, polyethylene succinate, ester starch and cellulose acetate, for being attached to an

inner surface of the bowl.

Claims 2-3 (Canceled)

4. (Currently Amended) The biodegradable starch bowl according to any one of

claims 1, 32, 33, or 34, wherein the unmodified starch is one or more selected from a group

consisting of corn, wheat, rice, tapioca and sweet potato.

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5. (Currently Amended) The biodegradable starch bowl according to <u>any one of</u> claims 1, <u>32, 33, or 34,</u> wherein the pulp fiber powder has a fiber length of 10-200 μm.

6. (Currently Amended) The biodegradable starch bowl according to <u>any one of</u> claims 15, 32, 33, or 34, wherein the pulp fiber powder is made by crushing a broadleaf tree.

Claims 7-12 (Canceled)

- 13. (Currently Amended) The biodegradable starch bowl according to <u>any one of</u> claims 1, 32, 33, or 34, further comprising a releasing agent of 0.5-5 wt%, wherein the releasing agent is a mixture of monostearyl citrate and magnesium stearate having the mixing ratio of 1: 1.5 by weight.
- 14. (Currently Amended) The biodegradable starch bowl according to <u>any one of</u> claims 1, <u>32, 33, or 34,</u> wherein the solvent is one or more selected from a group consisting of water, alcohol, alkaline aqueous solution and acidic aqueous solution.
- 15. (Currently Amended) The biodegradable starch bowl according to <u>any one of</u> claims 141, 32, 33, or 34, wherein the solvent is water.
- 16. (Currently Amended) A method for preparing a biodegradable starch bowl comprising steps of: preparing a composition for a biodegradable starch bowl comprising unmodified starch of 20-60 wt.%; pulp fiber powder of 5-30 wt.%; solvent of 30-60 wt.%;

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titanium dioxide for sterilizing and deodorizing in which an anatase content is 70% or more of 0.1-2.0 wt.%; and sodium benzoate or sodium propionate of 0.01-1 wt.%, based on the total amount of the composition (S1); and releasing agent of 0.5-5 wt.% (S1); preparing a bowl having a desired shape by heating and pressurizing the composition (S2); heating a biodegradable film which has a thickness of 100-300µm for water-resistance, made of one or more selected from the group consisting of polybutylene succinate, polyethylene succinate, ester starch and cellulose acetate so as to be softened (S3); and positioning the softened film on an upper part of the bowl and then pressurizing the film into the bowl with vacuum suction or air injection from an exterior, thereby attaching the film to an inner surface of the bowl (S4).

Claims 17-18 (Canceled)

- (Currently Amended) The method for preparing a biodegradable starch bowl according to <u>any one of claims</u> 16, <u>35, 36, or 37</u>, wherein the film is pressurized into the bowl with the air injection from an exterior and the vacuum-suction at the same time and thereby the film is attached to the inner surface of the bowl in the step of S4.
- 20. (Currently Amended) The method for preparing a biodegradable starch bowl according to <u>any one of claims</u> 16, 35, 36, or 37, wherein the unmodified starch being one or more selected from a group consisting of corn, wheat, rice, tapioca and sweet potato is used in the step of <u>SIS1</u>.

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21. (Currently Amended) The method for preparing a biodegradable starch bowl according to <u>any one of claims</u> 16, <u>35, 36, or 37</u>, wherein the pulp fiber powder having a fiber length of 10-200 µm is used in the step of S1.

22. (Currently Amended) The method for preparing a biodegradable starch bowl according to <u>any one of claims 1621</u>, <u>35</u>, <u>36</u>, or <u>37</u>, wherein the pulp fiber powder being made by crushing a broadleaf tree is used in the step of <u>SIS1</u>.

Claims 23-28 (Canceled)

- 29. (Currently Amended) The method for preparing a biodegradable starch bowl according to any one of claims 16, 35, 36, or 37, further comprising a releasing agent in the step of S1, wherein the releasing agent being a mixture of monostearyl citrate and magnesium stearate having the mixing ratio of 1:1.5 by weight is used in the step of S1.
- 30. (Currently Amended) The method for preparing a biodegradable starch bowl according to <u>any one of claims</u> 16, <u>35, 36, or 37,</u> wherein the solvent being one or more selected from a group consisting of water, alcohol, alkaline aqueous solution and acidic aqueous solution is used in the step of S1.
- 31. (Currently Amended) The method for preparing a biodegradable starch bowl according to <u>any one of claims 1630</u>, 35, 36, or 37, wherein the solvent being water is used in the step of S1.

Attorney Docket No.: Q94656 AMENDMENT UNDER 37 C.F.R. § 1.114(c)

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- (New) A biodegradable starch bowl being prepared to have a desired shape by 32. heating and pressurizing a composition for the biodegradable starch bowl comprising unmodified starch of 20-60 wt%; pulp fiber powder of 5-30 wt%; solvent of 30-60 wt%; titanium dioxide for sterilizing and deodorizing in which an anatase content is 70% or more of 0.5-2.0 wt%; and sodium propionate of 0.01-1 wt%, based on the total amount of the composition; and a biodegradable film which has a thickness of 100-300 µm for water-resistance, wherein the biodegradable film is made of one or more selected from the group consisting of polybutylene succinate, polyethylene succinate, polyglycolic acid, ester starch and cellulose acetate, for being attached to an inner surface of the bowl.
- (New) A biodegradable starch bowl being prepared to have a desired shape by 33. heating and pressurizing a composition for the biodegradable starch bowl comprising unmodified starch of 20-60 wt%; pulp fiber powder of 5-30 wt%; solvent of 30-60 wt%; titanium dioxide of 0.1-2.0 wt%, said titanium dioxide being doped with one or more selected from the group consisting of vanadium (V), molybdenum (Mo) and niobium (Nb); and sodium benzoate equal to or greater than 0.2 wt% and less than 0.5 wt%, based on the total amount of the composition; and a biodegradable film which has a thickness of $100\text{-}300~\mu m$ for water-resistance, wherein the biodegradable film is made of one or more selected from the group consisting of polybutylene succinate, polyethylene succinate, polyglycolic acid, ester starch and cellulose acetate, for being attached to an inner surface of the bowl.

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34. (New) A biodegradable starch bowl being prepared to have a desired shape by heating and pressurizing a composition for the biodegradable starch bowl comprising unmodified starch of 20-60 wt%; pulp fiber powder of 5-30 wt%; solvent of 30-60 wt%; titanium dioxide for sterilizing and deodorizing in which an anatase content is 70% or more of 0.5-2.0 wt%; and sodium benzoate equal to or greater than 0.2 wt% and less than 0.5 wt%, based on the total amount of the composition; and a biodegradable film which has a thickness of 100-300 μm for water-resistance, wherein the biodegradable film is made of one or more selected from the group consisting of polybutylene succinate, polyethylene succinate, polyglycolic acid, ester starch and cellulose acetate, for being attached to an inner surface of the bowl.

35. (New) A method for preparing a biodegradable starch bowl comprising steps of preparing a composition for a biodegradable starch bowl comprising unmodified starch of 20-60 wt%; pulp fiber powder of 5-30 wt%; solvent of 30-60 wt%; titanium dioxide of 0.1-2.0 wt%, said titanium dioxide being doped with one or more selected from the group consisting of vanadium (V), molybdenum (Mo) and niobium (Nb); and sodium propionate of 0.01-1 wt%, based on the total amount of the composition (S1); preparing a bowl having a desired shape by heating and pressurizing the composition (S2); heating a biodegradable film which has a thickness of 100-300 μm for water-resistance, the biodegradable film being made of one or more selected from the group consisting of polybutylene succinate, polyethylene succinate, polyglycolic acid, ester starch and cellulose acetate so as to be softened (S3); and positioning the softened film on an upper part of the bowl and then pressurizing the film into the bowl with vacuum suction or air injection from an exterior, thereby attaching the film to an inner surface of the bowl (S4).

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36. (New) A method for preparing a biodegradable starch bowl comprising steps of preparing a composition for a biodegradable starch bowl comprising unmodified starch of 20-60 wt%; pulp fiber powder of 5-30 wt%; solvent of 30-60 wt%; titanium dioxide for sterilizing and deodorizing in which an anatase content is 70% or more of 0.5-2.0 wt%; and sodium benzoate equal to or greater than 0.2 wt% and less than 0.5 wt%, based on the total amount of the composition (S1); preparing a bowl having a desired shape by heating and pressurizing the composition (S2); heating a biodegradable film which has a thickness of 100-300 μm for water-resistance, the biodegradable film being made of one or more selected from the group consisting of polybutylene succinate, polyethylene succinate, polyglycolic acid, ester starch and cellulose acetate so as to be softened (S3); and positioning the softened film on an upper part of the bowl and then pressurizing the film into the bowl with vacuum suction or air injection from an exterior, thereby attaching the film to an inner surface of the bowl (S4).

37. (New) A method for preparing a biodegradable starch bowl comprising steps of preparing a composition for a biodegradable starch bowl comprising unmodified starch of 20-60 wt%; pulp fiber powder of 5-30 wt%; solvent of 30-60 wt%; titanium dioxide of 0.1-2.0 wt%, said titanium dioxide being doped with one or more selected from the group consisting of vanadium (V), molybdenum (Mo) and niobium (Nb) and sodium benzoate equal to or greater than 0.2 wt% and less than 0.5 wt%, based on the total amount of the composition (S1); preparing a bowl having a desired shape by heating and pressurizing the composition (S2); heating a biodegradable film which has a thickness of 100-300 μm for water-resistance, the biodegradable film being made of one or more selected from the group consisting of

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polybutylene succinate, polyethylene succinate, polyglycolic acid, ester starch and cellulose acetate so as to be softened (S3); and positioning the softened film on an upper part of the bowl and then pressurizing the film into the bowl with vacuum suction or air injection from an exterior, thereby attaching the film to an inner surface of the bowl (S4).